

Application No. 10/521,914  
Paper Dated: October 2, 2006  
In response to USPTO correspondence of June 16, 2006  
Attorney Docket No. 1107-050118

**AMENDMENTS TO THE DRAWINGS**

Originally filed Figure 2 included a duplicate reference numeral "58". The attached Replacement Sheet, which includes Figures 2 and 3, replaces the original sheet that included Figures 2 and 3. As shown in the attached Annotated Sheet, the errant reference numeral "58" has been deleted and a lead line has been added to the correct occurrence of reference numeral "58".

Attachments: Replacement Sheet  
Annotated Sheet

### **REMARKS**

The Office Action of June 16, 2006 has been reviewed, and the Examiner's comments have been carefully considered. Claims 12-21 were pending in this application, with claim 12 written in independent form. The present Amendment amends claims 12-16, all in accordance with the originally-filed specification and adds new independent claims 22 and 23.

Independent claim 12 has been amended to more clearly demonstrate the novel and non-obvious differences between the present invention and the cited prior art. No new matter has been added. Applicants acknowledge with appreciation the Examiner's indication that claims 13 and 16 would be allowable if rewritten in independent form, including all of the limitations of the base claim and any intervening claims.

#### **Newly Added Claims**

New claim 22 recites the features of original claim 12 and objected claim 13. Accordingly, Applicants submit that new claim 22 does not present an issue of new matter and is patentable over the prior art of record.

New claim 23 recites the features of original claim 12 and objected claim 16, including the features of intervening original claims 14 and 15. Accordingly, Applicants submit that new claim 23 does not present an issue of new matter and is patentable over the prior art of record.

#### **Objections to the Specification and Drawings**

The abstract of the disclosure was objected to by the Examiner for including legal phraseology, such as "means" and "said". Applicants have amended the abstract to remove the terms including legal phraseology.

The written description was objected to for certain informalities, specifically, the Examiner has requested that the word "connects" identified on page 1, line 30 be amended to "connect", and that the reference numbers "S1" and "S2" identified on page 8, lines 35-36 be amended to "51" and "52", respectively. Applicants have amended the written description in accordance with the Examiner's suggestions.

The written description was also amended to correct certain typographical errors. On page 8, line 2, the term “pin 32” has been amended to recite “pivot pin 32”. Basis for this amendment can be found, for example, in the specification on page 7, line 8. On page 8, line 6, the term “second longitudinal end 20” has been amended to recite “second longitudinal member 20”. Basis for this amendment can be found, for example, in the specification on page 7, line 8. On page 8, line 36, the term “orifice 54” has been amended to recite “second orifice 54”. Basis for this amendment can be found, for example, in the specification on page 9, line 5. On page 9, line 16, the reference numeral “12” has been deleted. On page 9, lines 14 and 18, the term “pin 32” has been amended to recite “pivot pin 32”. Basis for this amendment can be found, for example, on page 7, line 8. On page 9, line 21, the term “ligature 32” has been amended to recite “ligature 42”. Basis for this amendment can be found, for example, in the specification on page 9, line 12.

The drawings were objected to for failing to comply with 37 CFR §1.84(p)(4) because reference numeral “58” in Figure 2 was used to designate two separate parts of the device. Applicants have amended Figure 2 to delete the errant second occurrence of reference numeral “58”. Applicants have also added a lead line to identify the part to which reference numeral “58” correctly refers. An Annotated Sheet showing the changes to Figure 2 in accordance with 37 C.F.R. §1.121(d)(1) and a Replacement Sheet in accordance with 37 C.F.R. §1.121(d) are submitted herewith.

Reconsideration and withdrawal of the objections to the abstract, written description and drawings are respectfully requested.

#### Rejections Pursuant to 35 U.S.C. §112

Claims 13-20 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Specifically, claims 13-16 were rejected for including insufficient antecedent basis. Claims 17-20 were rejected because they depend directly or indirectly from a rejected base claim.

Applicants have amended claims 13, 14 and 16 to correct the antecedent basis by deleting the word “the”. Applicants have also amended claim 15 to correct the antecedent basis by adding the language “a first longitudinal member” and “a second longitudinal member”. Reconsideration and withdrawal of the rejection of claims 12-21 under 35 U.S.C.

§112, second paragraph, are respectfully requested.

Rejections Pursuant to 35 U.S.C. §103

Claims 12, 14, 15 and 17-21 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,179,838 to Fiz ("Fiz '838") in view of PCT Publication No. WO0209604 to Burgess et al. ("Burgess '604"). Claims 14, 15 and 17-21 depend directly or indirectly from independent claim 12. According to the Office Action, Fiz '838 discloses a bone fixation device having a plurality of pedicle screws embedded in and fixed to corresponding pedicles of the spinal column. The bone fixation device of Fiz '838 comprises a connecting part capable of facing a rib and/or transverse process and is capable of being connected to a rod. As acknowledged by the Examiner, Fiz '838 fails to disclose, teach or suggest a ligature with a first end attached to the connecting part and a second free end. Burgess '604 is relied upon as disclosing a ligature with a first end attached to the connecting part and a free second end. According to the Office Action, it would have been obvious to one of ordinary skill in the art to construct the bone fixation device of Fiz '838 with the ligature attached to the connecting device of Burgess '604 in order to use the ligament to attach the vertebral fixing device to the spine.

Claim 12 has been amended to recite, *inter alia*:

a connecting part adapted to face said rib and/or said transverse process and to be connected to said rod, said connecting part having a first face facing said rib and/or said process and a second face opposed to said first face and being provided with fastening means;

an elongate flexible ligature adapted to connect together said connecting part and at least one rib and/or one transverse process, said flexible ligature having a first end secured to said fastening means, a first portion forming a loop, said first portion facing said first face of said connecting part and a second free end projecting out of said second face

Fiz '838 and Burgess '604 do not teach or suggest, alone or in combination, a flexible ligature having a first end secured to fastening means, and a second free end projecting out of a second face opposed to a first face facing a rib and/or a process as recited in Applicants' amended claim 12. Fiz '838 does not teach or suggest any ligature, let alone a flexible ligature. Furthermore, Burgess '604 does not disclose a flexible ligature having a first end secured to the fastening means and a second free end as recited in Applicants' claim

12. As shown in Figure 6 of Burgess '604, Burgess '604 teaches a fixed piece of wire 32 having two free ends. Burgess '604 does not teach or suggest that an end of the ligature is secured to the connecting part by fastening means provided in the connecting part. Neither Fiz '838 nor Burgess '604 teach or suggest any ligature having a first end secured to a fastening means, a first portion forming a loop, the first portion facing said first face of said connecting part and a second free end projecting out of said second face as claimed in amended claim 12. Accordingly, Applicants assert that the combination of Fiz '838 and Burgess '604 does not produce the invention as claimed in Applicants' amended claim 12. Applicants further submit that amended claim 12 is not obvious in view of Fiz '838, Burgess '604, or the combination of Fiz '838 and Burgess '604.

Furthermore, Applicants assert that Fiz '838 fails to provide any motivation for combining the bone fixation device with any ligature, let alone a flexible ligature having an end that is secured to the connecting part by fastening means provided in the connecting part. Accordingly, Applicants submit that the Examiner's motivation for combining Fiz '838 and Burgess '604 is based on impermissible hindsight.

For all of the foregoing reasons, applicant believes that amended claim 12 is not obvious over the prior art of record and is in condition for allowance.

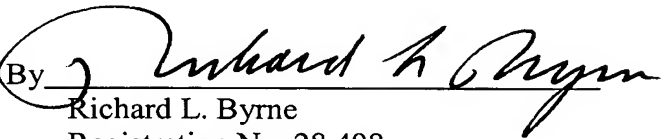
Claims 14, 15 and 17-21 depend directly or indirectly from, and add further limitations to, amended independent claim 12. Dependent claims 14, 15 and 17-21 are likewise believed to be in condition for allowance.

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In view of the foregoing amendments and remarks set forth herein, it is submitted that claims 12-23 are patentable over the cited references and are in condition for allowance. Reconsideration and withdrawal of the rejections and objections, approval of the proposed drawing correction, and allowance of all pending claims 12-23 are respectfully requested.

Respectfully submitted,

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